

PERFORMANCE REPORT

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INLAND FISHERIES DIVISION MONITORING AND MANAGEMENT PROGRAM

2012 Fisheries Management Survey Report

O.C. Fisher Reservoir

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SURVEY AND MANAGEMENT SUMMARY

Fish populations in O.C. Fisher Reservoir were not surveyed in 2012-2013 due to extreme low water levels. The most recent survey was conducted in fall 2009. This report contains a management plan for the reservoir.

- **Reservoir Description:** O. C. Fisher Reservoir is a 5,440-acre reservoir at conservation pool on the west side of San Angelo, Texas. At the time this report was written, the reservoir was mostly dry (<1% full). Access to the reservoir is controlled by San Angelo State Park, which surrounds most of the lake basin.
- **Management History:** Important sport fishes have included Largemouth Bass, White Crappie, and catfishes. Sport fishes have been managed with statewide regulations.
- **Fish Community:** Sampling has not been conducted since 2009. Low water level and the subsequent fish kill eliminated most of the fish community in 2011.
- **Management Strategies:** Keep informed of watershed issues, and do research and/or outreach projects dealing with those issues; write informational newspaper article(s) on the importance of water conservation to this and other local fisheries. If the reservoir catches a substantial amount of water, stock fingerling Bluegill, Largemouth Bass, and Channel Catfish, and conduct management stockings of adult White Crappie and both Gizzard and Threadfin Shad. Conduct standard monitoring in 2016/2017.

INTRODUCTION

The purpose of the document is to provide fisheries information and make management recommendations to protect and improve the sport fishery. Since the reservoir has been mostly dry for over two years, this report documents water level history and other details of management history, but does not include fisheries data beyond a brief summary of the most recent survey.

Reservoir Description

O. C. Fisher Reservoir was constructed in 1953 on the North Concho River on the northwest side of San Angelo, Texas. The 5,440-acre (when full) impoundment is used for recreation, municipal water supply and irrigation. Access to the reservoir is controlled by San Angelo State Park, which surrounds most of the lake basin. At the time of writing the reservoir was mostly dry (<1% full). Other descriptive characteristics for O. C. Fisher Reservoir are presented in Table 1.

Angler Access

Angler access is controlled through the South Gate of San Angelo State Park (entry fee required). At conservation pool, the reservoir has two concrete boat ramps and ample shoreline access in the park. The ramp nearest the dam has been extended in recent years.

Management History

Previous management strategies and actions: Management strategies and actions from the previous survey report (Scott and Farooqi 2009) included:

1. Get involved with watershed planning groups that have impacts on O. C. Fisher's watershed, and inform the public of the importance of water conservation.

Action: We participated in several Concho River Watershed Protection Plan meetings and gathered information on brush control projects being done. We wrote a water conservation article for San Angelo Standard Times, and cooperated with the UCRA Water Education Center on their annual outreach event. We also helped conduct a watershed workshop for landowners, and taught high school students about importance of water conservation at Bass Brigade summer camp.

2. Assess shad population; if shad abundance and water level are suitable, stock White Bass adults.

Action: An electrofishing survey was conducted on the reservoir in September 2009, but the dropping water level prevented us from conducting the management stocking the following spring.

Harvest regulation history: Sport fishes in O. C. Fisher Reservoir are currently managed with statewide regulations (Table 2).

Stocking history: Species stocked have included Threadfin Shad, Blue Catfish, Channel Catfish, Flathead Catfish, Florida and Northern Largemouth Bass, and various sunfish. Walleye were stocked in the past, with no success. The complete stocking history is in Table 3.

Vegetation/habitat history: The reservoir has no habitat management history.

Water transfer: The reservoir was built primarily for flood control. No interbasin water transfers are known to occur.

METHODS

An electrofishing survey was conducted according to the Fishery Assessment Procedures (TPWD, Inland Fisheries Division, unpublished manual revised 2009) in fall 2009. Water level data were provided by U.S. Geological Survey website. A brief summary of the 2009 survey data follows. No additional statistics were calculated for this report.

RESULTS AND DISCUSSION

Prey species: Gizzard Shad abundance in 2009 was high at 405/h. Bluegill were captured at 20/h.

Catfishes: We did not conduct a survey targeting catfishes.

White bass: We did not conduct a survey targeting White Bass.

Largemouth bass: Largemouth Bass catch rate was 41/h in the 2009 survey, and they ranged up to 19 inches in length.

White crappie: We did not conduct a survey targeting White Crappie.

Fisheries management plan for O. C. Fisher Reservoir, Texas

Prepared – July 2013.

ISSUE 1: Currently, the reservoir is less than 1% capacity.

MANAGEMENT STRATEGIES

1. Keep informed on local water issues and projects, and do special research and/or outreach projects dealing with watershed issues.
2. Write at least one article for the local newspaper on the importance of water conservation to the local fisheries.
3. If the reservoir catches a substantial amount of water, stock fingerling Bluegill, Largemouth Bass, and Channel Catfish, and adult White Crappie and both Threadfin and Gizzard Shad.
4. Continue to work with San Angelo State Park to develop the alternate fishing site for the park—Javalina Draw fishing pond.

ISSUE 2: Many invasive species threaten aquatic habitats and organisms in Texas and can adversely affect the state ecologically, environmentally, and economically. For example, zebra mussels (*Dreissena polymorpha*) can multiply rapidly and attach themselves to any available hard structure, restricting water flow in pipes, fouling swimming beaches and plugging engine cooling systems. Giant salvinia (*Salvinia molesta*) and other invasive vegetation species can form dense mats, interfering with recreational activities like fishing, boating, skiing and swimming. The financial costs of controlling and/or eradicating these types of invasive species are significant. Additionally, the potential for invasive species to spread to other river drainages and reservoirs via watercraft and other means is a serious threat to all public waters of the state.

MANAGEMENT STRATEGIES

1. Cooperate with the controlling authority to post appropriate signage at access points around the reservoir.
2. Contact and educate marina owners about invasive species, and provide them with posters, literature,

- etc... so that they can in turn educate their customers.
3. Educate the public about invasive species through the use of media and the internet.
 4. Make a speaking point about invasive species when presenting to constituent and user groups. Keep track of (i.e., map) existing and future inter-basin water transfers to facilitate potential invasive species responses.

SAMPLING SCHEDULE JUSTIFICATION:

The proposed sampling schedule includes mandatory monitoring in 2016/2017 (Table 4). A substantial water rise will be necessary to be able to sample the fish community.

LITERATURE CITED

Scott, M., and Farooqi. 2009. Statewide freshwater fisheries monitoring and management program survey report for O. C. Fisher Reservoir, 2008. Texas Parks and Wildlife Department, Federal Aid Report F-30-R, Austin.

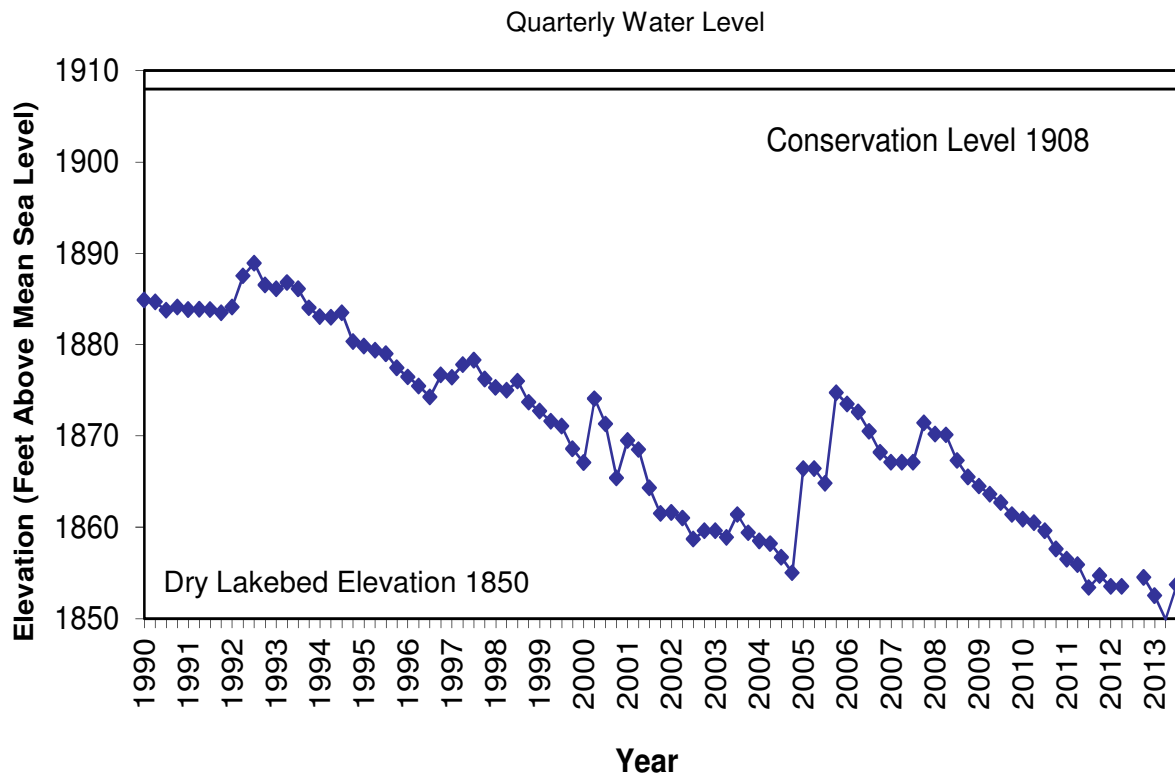


Figure 1. Quarterly water level elevations recorded for O.C. Fisher Reservoir, Texas.

Table 1. Characteristics of O. C. Fisher Reservoir, Texas.

Characteristic	Description
Year constructed	1953
Controlling authority	United States Army Corps of Engineers
County	Tom Green
Reservoir type	Mainstream
Shoreline Development Index	2.60
Conductivity	686 μ mhos/cm

Table 2. Harvest regulations for O. C. Fisher Reservoir, Texas.

Species	Bag Limit	Length limit
Catfish: Channel and Blue, their hybrids and subspecies	25 (in any combination)	12-inch minimum
Catfish, Flathead	5	18-inch minimum
Bass, White	25	10-inch minimum
Bass, Largemouth	5	14-inch minimum
Crappie: White and Black, their hybrids and subspecies	25 (in any combination)	10-inch minimum

Table 3. Stocking history of O. C. Fisher Reservoir, Texas. Size categories are FGL = 1-3 inches; ADL = adult; AFGL = 8 inches; and UNK = unknown.

Year	Number	Size	Year	Number	Size
<u>Threadfin Shad</u>			<u>Kemp's Largemouth Bass</u>		
1984	8,500	UNK	1974	4,500	FGL
<u>Gizzard Shad</u>			<u>Green x Redear Sunfish</u>		
2005	160	ADL	1969	40,000	UNK
<u>Bluegill</u>			1974	100,000	UNK
2005	75,145	FGL	Total	140,000	
<u>Blue Catfish</u>			<u>Redear Sunfish</u>		
1971	1,500	UNK	1970	12,000	UNK
1974	24,600	UNK	1971	5,040	UNK
1980	39,132	UNK	Total	17,040	
1981	30,004	UNK	<u>Largemouth Bass</u>		
1982	30,427	UNK	1966	209,500	UNK
2005	75,000	FGL	1968	139,000	UNK
2006	112,596	FGL	1969	25,450	UNK
Total	313,259		1970	43,135	UNK
			1971	10,000	UNK

Table 3, continued.

<u>Channel Catfish</u>			1972	6,000	UNK
1966	3,000	UNK	1973	3,425	UNK
1969	112,100	UNK	Total	436,510	
1973	12,250	UNK			
1974	56,400	UNK	<u>Florida Largemouth Bass</u>		
1980	61,884	UNK	1987	145,249	FGL
1987	200,150	FGL	1996	107,803	FGL
1994	50,340	FGL	2003	71,426	FGL
2005	12,301	ADL	2005	239	ADL
2005	20,018	AFGL	2005	75,952	FGL
2005	75,022	FGL	Total	400,669	
2006	120,619	FGL			
Total	724,084		<u>White Crappie</u>		
<u>Flathead Catfish</u>			1969	5,000	UNK
1971	3,000	UNK	1972	12,000	UNK
			2005	394	ADL
			Total	17,394	
<u>Warmouth</u>					
1969	38,000	UNK			
<u>Walleye</u>					
1968	7,400	UNK			
1970	1,100,000	UNK			
1971	740,000	UNK			
1972	1,030,000	UNK			
1973	3,900,000	UNK			
1974	50,000	UNK			
1983	6,306,250	UNK			
1989	4,787,250	FRY			
1990	4,962,600	FRY			
Total	22,883,500				

Table 4. Proposed sampling schedule for O. C. Fisher Reservoir, Texas. Sampling period is June through May. Gill netting surveys are conducted in the spring, while electrofishing and trap netting surveys are conducted in the fall. Standard survey denoted by S, and additional survey denoted by A. The reservoir must catch a significant amount of water to enable access for fish sampling.

Survey year	Electrofishing Fall(Spring)	Trap net	Gill net	Habitat			Creel survey	Report
				Structural	Vegetation	Access		
2013-2014								
2014-2015								
2015-2016								
2016-2017	S	S	S		S	S		S